

Hepatitis C

Disease Fact Sheet Series

What is hepatitis C?

Hepatitis C is a liver disease caused by the hepatitis C virus (HCV), which is found in the blood of persons who have this disease.

How is the virus spread?

HCV is spread primarily by exposure to human blood from an infected person. It can also be spread sexually or perinatally from an infected mother to her infant. Blood products, organs, tissues, semen and vaginal secretions from an infected person are sources for potential HCV infection transmission. HCV is not spread by casual contact such as hugging, sneezing, coughing or sharing food. However, sharing razors or toothbrushes with an infected person could spread HCV.

Who should be tested for hepatitis C?

- Persons who ever injected illegal drugs, including those who injected once or a few times many years ago.
- Persons who were treated for clotting problems with a blood product made before 1987.
- Persons who were notified that they received blood from a donor who later tested positive for hepatitis C.
- Persons who received a blood transfusion or solid organ transplant before July 1992.
- Long-term hemodialysis patients.
- Persons who have signs or symptoms of liver disease (e.g., abnormal liver enzyme tests).
- Healthcare workers and others (e.g., family members) after significant exposures (e.g., needle sticks or splashes to the eye) while caring for or assisting an HCV-infected person.
- Children born to HCV-positive women.
- Sexual partners of HCV infected persons, although the risk of transmission is low.

What are the signs and symptoms of HCV infection?

Most (90%) HCV infections are not symptomatic. A few individuals experience elevated (seven times the normal range) or fluctuating levels of the liver enzyme alanine aminotransferase, loss of appetite, fatigue, nausea and vomiting, vague abdominal pain and jaundice. Of persons infected with HCV, 15% may develop cirrhosis over a period of 20 to 30 years, and 5% may die from the consequences of long term infection (liver cancer or cirrhosis).

(Over)

How soon do signs or symptoms occur?

Persons with acute illness usually develop symptoms 6-7 weeks after exposure. Hepatitis C antibody (anti-HCV) can be found in 7 out of 10 persons when symptoms begin and in about 9 out of 10 persons within 3 months after symptoms begin.

When and for how long is a person able to transmit HCV?

Some persons carry the virus in their blood and may remain contagious for years. A chronic carrier state may develop in as many as 75-85% of infected persons.

Are there treatments for hepatitis C?

The FDA has approved three drugs to treat HCV infection. Patients are advised to consult their medical providers about treatment options. Immune globulin (IG) is **not** effective for postexposure prophylaxis of hepatitis C.

Are there sensitive and specific tests for diagnosing hepatitis C?

There are several blood tests that can be done to diagnose HCV infection. The enzyme immunoassay (EIA) is usually done first. The recombinant immunoblot assay (RIBA) is a supplemental test used to confirm a positive EIA test. Both the EIA and the RIBA detect anti-HCV in serum or plasma. Anti-HCV does not tell whether the infection is new (acute), chronic (long-term) or is no longer present.

The presence or absence of virus (HCV RNA) in the blood is detected with qualitative reverse transcriptase polymerase chain reaction test (RT-PCR). PCR and other tests to directly detect virus are not yet licensed but are widely used in clinical practice. A single positive PCR test indicates infection with HCV. A single negative PCR test does not prove that a person is not infected. Virus may be present in the blood and not found by PCR. Also, a person infected in the past who has recovered may have a negative test. When hepatitis C is suspected and the PCR is negative, the PCR should be repeated 6 months later.

How can the spread of HCV be prevented?

Persons who are infected with HCV should take the following precautions to prevent transmitting hepatitis C:

- Do not donate blood, body organs, semen (sperm), ova, or other tissue.
- Do not share toothbrushes, razors or other sharp personal care articles.
- Cover cuts and open sores.
- Do not share needles or works with others and use only clean needles and works. Staff in a public health department can provide information on how to obtain clean needles, e.g., through needle exchange or a local pharmacy, and how to enter a drug treatment program.
- The rate of transmission of HCV between regular sexual partners is low. Partners who want to lower the chance of transmitting HCV should use latex condoms.
- Persons having sex with multiple partners should use a latex condom correctly every time to prevent the transmission of sexually transmitted diseases to susceptible partners.